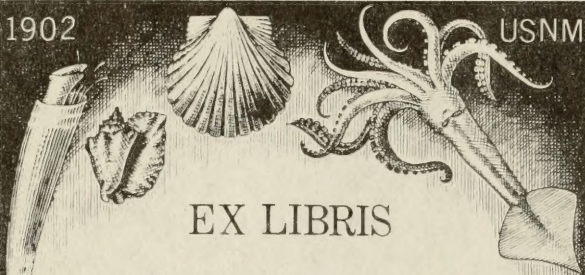




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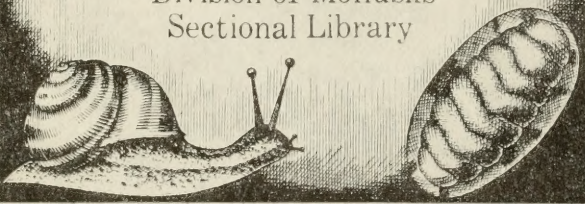
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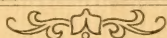
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# SHELLS OF MAINE



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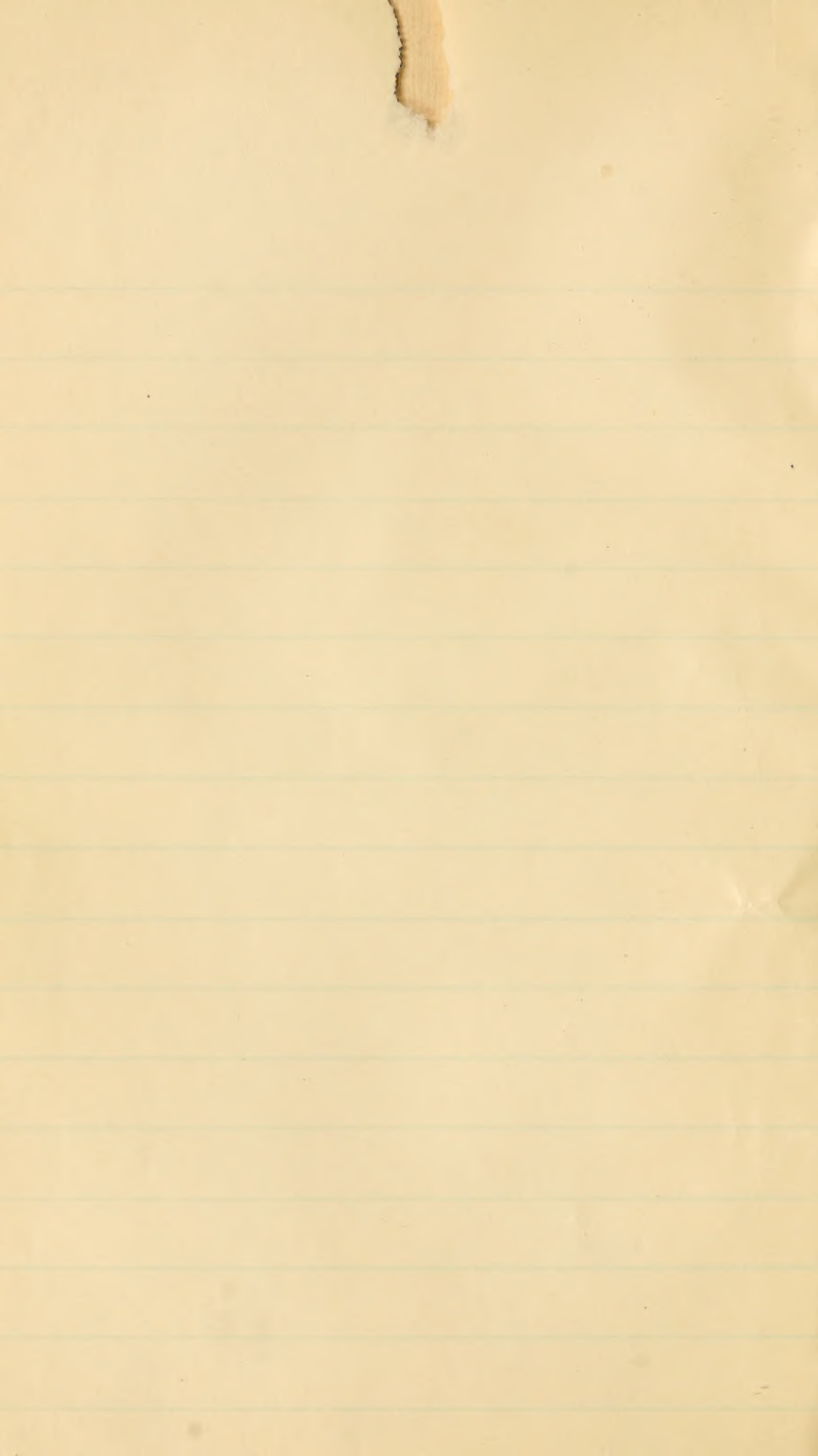




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## SHELLS OF MAINE.

A Catalogue of the Land, Fresh-water and Marine Mollusca of  
Maine, by NORMAN WALLACE LERMOND.

### INTRODUCTORY.

No general list of Maine shells—including land, fresh-water and marine species—has been published since 1843, when Dr. J. W. Mighels' list was printed in the Boston Journal of Natural History.

Dr. Mighels may be called the "Pioneer" conchologist of Maine.

By profession a physician, in his leisure hours he was a most enthusiastic collector and student of all forms of molluscan life.

Enthusiasm such as his was "contagious" and he soon had gathered about him a little band of active students and collectors. Of these Capt. Walden of the U. S. Revenue Cutter "Morris" was dredging in deep water and exploring the eastern shores and among the islands, and "by his zeal procured many rare species;" Dr. Ray, principal of the Insane Hospital at Augusta, collected the land and fresh water forms in the vicinity of that city; Dr. Milliken of Unity in Waldo county and Dr. True, principal of the academy at Monmouth in Kennebec county, collected in those counties.

These collectors were pursuing their favorite "hobby," in the late thirties and early forties.

In 1851 Dr. William Stimpson, the noted conchologist of Massachusetts, published his "Shells of New England," which included many Maine records. His "Synopsis of the Marine Invertebrata of Grand Manan," containing a list of the mollusca dredged by him off that island, was published in 1854; and in 1866 the Smithsonian Institution published his "Check List" of New England Shells, Nos. 1 to 6.

In the early fifties, J. W. Chickering, Jr., and Edward S. Morse became students of conchology under Dr. Mighels.

In 1854 J. W. Chickering, Jr., published his "List of Marine, Fresh water and Land Shells, found in the immediate vicinity of Portland."

As Dr. Mighels had gathered his band of collectors around him in the forties, so Morse and Fuller had several earnest collectors associated with them in the early sixties; of these Rev. E. C. Bolles, a Universalist minister of Portland, now professor in Tufts College, and Major John M. Gould of that city, did much collecting in Cumberland and Oxford counties. While neither Gould nor Bolles published anything on Maine mollusca, they both furnished data and material and aided Professor Morse in the preparation of his "Pulmonifera of Maine," as he acknowledges in the preface to and throughout that work.

In 1861 Charles B. Fuller of Portland, who was attached to the State Scientific Survey, under the directorship of Ezekiel Holmes, and who was associated with A. S. Packard, Jr., in his trip to the eastern Maine coast, dredged and collected the off-shore forms along the coast from Eastport to Casco Bay and the land species on the islands of that bay. The results of this expedition were embodied in his "Report on Marine Zoology," and published in the secretary of agriculture's report for 1862, pp. 129 to 133.

In 1864 Prof. Edw. S. Morse published a finely illustrated catalogue of the land and fresh-water species of the State, with full descriptions and notes on distribution.

To Prof. Addison E. Verrill, a native of Maine, now director of the Connecticut Academy of Arts and Sciences, we are indebted for much of our knowledge of the deep-sea forms. He spent seven summers, from 1865 to 1872, at Eastport and was attached to the government dredging expedition of 1873. The results of his work on the Maine molluscan fauna have appeared in various scientific publications and government reports. His "Explorations of Casco Bay" was published in the U. S. Fish Commissioner's Report for 1874, and in 1882 a complete list of marine species added to the fauna of the New England region during the past ten years, in *Trans. Conn. Academy Arts and Sciences*, vol. 5, pp. 447 to 588.

The first list of Maine shells ever published was that of Dr. Charles T. Jackson, State Geologist, which appeared in an appendix to his first report on the Geology of Maine, Augusta, 1837. In this list Dr. Jackson enumerates 38 marine, 9 fresh-water and 3 land species, or a total of 50 species. Dr. Mighels'





1843 list contains 113 marine, 38 fresh-water and 23 land species, or a total of 174 species. Morse in his 1864 list gives 55 fresh-water and 50 land species, or a total of 105 species. In his published lists from 1874 to 1884, Verrill enumerates 106 marine species and 7 varieties. While the present list includes 256 species and 13 varieties of marine, 82 species and 20 varieties of fresh-water and 65 species and 5 varieties of land shells, thus showing quite a growth in our knowledge of the mollusca of Maine.

In working up local faunas the following field naturalists have done excellent work and added much to our knowledge of the shells of Maine: Olof O. Nylander in Aroostook; Anson Allen at Orono; John A. Allen in the towns of Hebron and Buckfield, Oxford county; Arthur H. Norton, curator of the Portland Society of Natural History, in Cumberland county; Dr. W. C. Kendall at Freeport and Eastport; Rev. Henry W. Winkley at Eastport, Islesboro, Wiscasset, Old Orchard and Casco Bay; Edwin P. Wentworth and wife at Newcastle, Lincoln county and South Portland, Cumberland county; Prof. J. S. Kingsley of Tufts College, in Casco Bay; Dwight Blaney, dredging in Frenchman's Bay, seasons from 1901 to 1906; John B. Henderson, Jr., and George H. Clapp at Kennebunkport and at Bar Harbor; H. S. Colton at Mt. Desert; Edward W. Roper in Cumberland, Piscataquis and Waldo counties; Henry Jackson, Jr., at North Haven, Penobscot Bay; Charles W. Johnson, curator Boston Society of Natural History, at Deer Isle in Moosehead Lake; and the author in Knox county.

Many of the above collectors have published in local lists the results of their collecting, for the main part in the several volumes of the *Nautilus*. In 1901 Prof. Kingsley's "Preliminary Catalogue of the Marine Invertebrata of Casco Bay" was published in vol. 2 of the proceedings of the Portland Society of Natural History. This list includes 154 species of marine mollusca. In 1904 Blaney's "List of Shell-bearing Mollusca of Frenchman's Bay, Maine," was published in vol. 32, No. 2, of the Proceedings of the Boston Society of Natural History, and a supplemental list in *Nautilus*, vol. 19, p. 110-111.

The State has been only partially explored as yet conchologically: Casco, Eastport and Frenchman's Pays having been the

most thoroughly explored for marine species; and Aroostook, Cumberland, Oxford, Knox, Penobscot, York and Hancock counties for land and fresh-water species. Little or no collecting has been done in Androscoggin, Franklin, Sagadahoc, Washington, Waldo or Somerset counties. 183 species have been reported from Casco Bay, 146 from near Eastport, 137 from Frenchman's Bay and 81 marine species from Penobscot Bay. The following table will show at a glance the distribution of species by counties, including all known records of land and fresh-water species in Maine.

	LAND.		FRESH-WATER.		TOTAL.	
	Spec.	Var.	Spec.	Var.	Spec.	Var.
Androscoggin.....	1	-	1	-	2	-
Aroostook.....	35	4	59	12	94	16
Cumberland.....	43	1	34	3	77	4
Franklin.....	1	-	1	-	2	-
Hancock.....	35	2	3	-	38	2
Kennebec.....	14	-	16	1	30	2
Knox.....	38	3	38	8	76	11
Lincoln.....	11	1	11	1	22	1
Oxford.....	43	2	29	2	72	2
Penobscot.....	32	2	28	2	60	4
Piscataquis.....	11	1	6	1	17	4
Sagadahoc.....	1	-	3	-	4	-
Somerset.....	4	-	9	-	13	-
Waldo.....	5	2	3	-	8	2
Washington.....	-	-	3	-	3	-
York.....	36	2	18	1	54	3

It is with the hope of stimulating further research, especially in those counties where little or no work has been done, and thus extending our knowledge of the distribution of the shells of Maine, that this list is published. Hoping to publish a revised list later on, we shall be glad to receive specimens or records of shells from all sections of the State.

N. W. LERMOND.

Thomaston, R. F. D., December 21, 1908.











## A LIST OF THE SHELLS OF MAINE.

## MARINE SPECIES.

*Pelecypoda* (Bi-valves).

- ✓ *Solemya velum* (Say) 1822.  
Casco Bay (Kingsley).
- ✓ *Solemya borealis*, Totten.  
Casco Bay (Fuller, Kingsley); Winter Harbor (Henderson).
- ✓ *Nucula tenuis* (Montagu).  
Casco Bay to Eastport.
- ✓ *Nucula proxima*, Say.  
Casco Bay to Eastport.
- ✓ *Nucula delphinodonta*, Mighels and Adams, 1842.  
Casco Bay to Eastport.
- ✓ *Yoldia limatula* (Say).  
Casco Bay to Eastport.
- ✓ *Yoldia sapotilla* (Gould).  
Casco Bay to Eastport.
- ✓ *Yoldia myalis* (Couthouy).  
Casco Bay to Eastport.
- ✓ *Yoldia thraciæformis* (Storer), 1837.  
Casco Bay to Eastport.
- ✓ *Yoldia lucida* (Loven).  
*Nucula navicularis*, Mighels, 1841.  
*Yoldia obesa*, Stimpson, 1851.  
Casco Bay; North Haven, Penobscot Bay (Henry Jackson, Jr.).
- Yoldia frigida*, Terell, 1859.  
Gulf of Maine, 88 to 92 fathoms, and Jeffreys Ledge (Verrill).
- Yoldia cascoensis* (Mighels), 1841.  
Casco Bay (Mighels and Chickering).

- ✓ *Leda tenuisulcata* (Couthouy), 1838.  
*Nucula minuta*, Mighels, 1842.  
 Casco Bay to Eastport.
- Leda caudata* (Donovan).  
*Nucula rostrata*, Mighels.  
 Casco Bay, rare (Mighels); Gulf of Maine, 102 fath.  
 (Verrill).
- Arca* (*Bathyarca*) *pectunculoides*, Scacchi, 1833.  
 Casco Bay (Kingsley); just outside Casco Bay, 94  
 fath. and Cashes Ledge, 27 to 90 fath. (Verrill).
- Arca* (*Bathyarca*) *anomala*, Verrill and Bush.  
 Off Cashes Ledge, 27 fath. (Verrill).
- ✓ *Ostrea virginica*, Gmelin.  
*Ostrea canadensis*, Lamarck.  
*Ostrea borealis*, Stimpson, 1851.  
 (The common oyster.)

This shell-fish was common in the tidal rivers and bays of the Maine coast, as the Indian shell heaps, notably the one on the banks of the Damariscotta river, in the town of Damariscotta, and dead shells still to be found in the beds of the rivers eloquently attest. The cause of their dying out on the coast of Maine has not, to our knowledge, been satisfactorily explained. Several attempts, at different times, to restock the rivers have ended in failure, with the possible exception of a bed in Sheepscot river, Lincoln county. There are specimens from this river in the museum of the Portland Society of Natural History that were taken alive by Mr. G. M. Brown, the date of collection not being given. Rev. Henry W. Winkley informs me that he has in his collection a specimen of *ostrea virginica* from the Sheepscot river at a place called Sheepscot bridge, about two miles above Wiscasset. He further says: "There is a small bed of living oysters there and I understand they have survived from ancient times."

- ✓ *Pecten gibbus* var. *borealis*, Say.  
*Pecten irradians* of authors.  
 (The common or eastern scallop.)  
 Portland harbor (C. B. Fuller collection in Portland  
 museum; in Indian kitchen midden, shores of New  
 Meadows river, Brunswick, (Prof. Leslie Lee).







*Pecten islandicus* (Muller).

(The Arctic scallop.)

Casco Bay to Eastport.

*Pecten magellanicus*, Gmelin.

*Pecten tenuicostatus*, Mighels, 1842.

*Chlamys clintonius*, Verrill.

(The Maine, Great or Giant scallop.)

Casco Bay to Eastport.

This is the largest *Pecten* on the Atlantic coast, attaining a very large size, a specimen from Portland Harbor, and now in the Portland museum, measuring 6 11-16 in length by 7 3-16 in width. The abductor muscle, called by the fishermen the "eye" or "heart," of the scallops, both the common and Maine species, is largely used for food. "Scalloping," or taking the scallops at dredges, is no inconsiderable industry on the Maine coast, pursued by many fishermen.

*Pecten pustulosus*, Verrill, 1873.

Gulf of Maine, 115 to 150 fath. (Verrill).

*Pecten subimbrifer*, Verrill and Bush.

*Pecten haskynsi*, Verrill (not Forbes).

Gulf of Maine, 121 fath. (Verrill).

*Anomia simplex*, d'Orbigny.

*Anomia ephippium*, Gould, 1870.

*Anomia electrica*, Gould, 1870.

*Anomia glabra*, Verrill, 1873.

Casco Bay to Eastport.

*Anomia aculeata*, Linné.

Casco Bay to Eastport.

*Mytilus edulis*, Linné.

(Common black or blue mussel.)

This edible shell-fish is found in beds, at low water mark, all along the Maine coast. And while it lacks the flavor of the clam, it is quite palatable.

*Mytilus edulis* var. *pellucidus*, Pennant.

(Rayed or translucent mussel.)

Found in company with the type species, but not nearly as abundant.

*Modiolus modiolus*, (Linné).

(Red or horse mussel.)

Everywhere along the coast in tide pools, crevices of rocks and in all depths up to 80 fathoms.

- ✓ *Modiolus demissus plicatula*, Lamarck.

(Ribbed mussel.)

Casco Bay (Chickering, Fuller, Verrill, Kingsley); banks of New Meadows river, Brunswick (Prof. Lee, Norton and Lermont); Hanaseeket river, Freeport (Dr. W. C. Kendall); Sheepscot river, Lincoln county (Winkley); Damariscotta river at Newcastle, most northern Maine record (Wentworth).

- ✓ *Modiolaria discors* (Linné).

*Modiolaria lævigata*, Gray.

*Modiola discrepans*, Mighels, 1843.

Casco Bay to Eastport.

- ✓ *Modiolaria nigra* (Gray), 1824.

*Modiola pectinula*, Gould, 1841.

*Modiola nexa*, Mighels, 1841.

*Mytilus pectinulus*, Stimpson, 1851.

Casco Bay to Eastport.

- ✓ *Modiolaria corrugata* (Stimpson).

*Mytilus corrugatus*, Stimpson, 1851.

Casco Bay to Eastport.

*Dacrydium vitreum* (Moller).

*Modiola vitrea*, Moller, 1842.

Just outside Casco Bay. 50 to 95 fath. (Verrill, Kingsley).

- ✓ *Crenella glandula* (Totten).

*Modiola glandula*, Mighels, 1843.

Casco Bay to Eastport.

*Crenella decussata* (Montagu).

*Mytilus decussatus*, Stimpson, 1851.

Casco Bay to Eastport.

- ✓ *Periploma fragilis* (Totten).

*Periploma papyracea*, Conrad.

*Anatina papyracia*, Gould, 1870.

Casco Bay to Eastport.

- ✓ *Periploma* (*Cochlodesma*) *leana* (Conrad).

*Cochlodesma leanum*, Stimpson, 1851.

Casco Bay to Eastport.

- ✓ *Thracia conradi*, Couthouy.

Casco Bay to Eastport.





✓ *Thracia truncata*, Mighels and Adams, 1842.

Casco Bay to Eastport.

*Thracia myopsis*, Beck.

*Thracia couthouyi*, Stimpson, 1851.

Casco Bay to Eastport.

✓ *Pandora* (*Clidiophora*) *gouldiana*, Dall.

*Pandora trilineata*, Stimpson, 1851.

Casco Bay to Eastport.

✓ *Lyonsia hyalina* (Conrad).

Casco Bay to Eastport.

*Lyonsia arenosa* (Moller).

*Lyonsia arenata*, Kingsley, 1901.

Casco Bay (Kingsley); North Haven, Penobscot Bay, extremely rare (Henry Jackson, Jr.); rare at Frenchman's Bay, only one specimen taken in 10 to 12 fath. (Blaney).

*Poromya granulata*, Nyst and Westendorp.

Gulf of Maine, 150 fath. (Verrill).

*Cuspidaria glacialis*, G. O. Sars.

*Neæra arctica*, Verrill, 1872.

*Neæra glacialis*, Verrill, 1882.

Just outside Casco Bay, 50 to 95 fath. (Verrill, Kingsley); Frenchman's Bay, one dead defective specimen, 25 fath. (Blaney).

*Cuspidaria pellucida* (Stimpson).

*Neæra pellucida*, Stimpson.

Casco Bay to Eastport.

*Cuspidaria obesa*, Loven.

*Neæra obesa*, Verrill, 1882.

Gulf of Maine, 52 to 92 fath. (Verrill).

✓ *Cyclas islandica* (Linné).

*Cyprina islandica*, Mighels, 1843; Gould, 1870.

Casco Bay to Eastport.

✓ *Astarte castanea* (Say), 1822.

Casco and Frenchman's Bays.

*Astarte undata*, Gould.

*Astarte sulcata*, Stimpson, 1851.

Casco Bay to Eastport.

*Astarte undata* var. *latisulcata* (Hanley).

Frenchman's Bay, 16 to 30 fath. (Blaney).

*Astarte quadrans*, Gould.

Casco Bay to Eastport.

*Astarte portlandica*, Mighels.

Casco Bay to Eastport.

*Astarte elliptica* (Brown).

Casco Bay (Kingsley); six miles east of Seguin, 33 fath. (Verrill).

*Astarte subæquilatera*, Sowerby.

*Astarte crebricostata*, Gould.

*Astarte lens*, Stimpson MSS., Verrill, 1873.

Casco Bay to Eastport.

*Astarte borealis*, Schumacher.

*Astarte semisulcata*, Gould, 1870.

Frenchman's Bay, rare, only valves (Blaney);  
Machias Bay (Fuller); off Treats Island, Eastport  
(Fuller).

*Astarte striata* (Leach).

*Astarte banksi*, Leach.

Frenchman's Bay, 20 fath., rare, only valves (Blaney).

✓ *Venericardia borealis*, Conrad.

*Cardita borealis*, Mighels, 1843, Stimpson, 1851.

*Cyclocardia borealis*, Verrill, 1873.

Casco Bay to Eastport.

✓ *Venericardia novangliæ* (Morse), 1869.

*Cardita* (*Venericardia*) *borealis* var. *novangliæ*, Dall, 1903.

Casco Bay to Eastport.

✓ *Phacoides filusus* (Stimpson).

*Lucina filosa*, Stimpson, 1851.

Old Orchard Beach, single valve (Norton); Casco  
Bay (Kingsley); Portland Harbor (Fuller); near  
Machias (Capt. Walden).

✓ *Thyasira gouldi* (Philippi).

*Lucina flexuosa*, Gould, 1841.

*Cryptodon gouldi*, Gould, 1870.

Casco Bay to Eastport.

*Thyasira plana* (Verrill and Bush).

Casco Bay (Verrill); Frenchman's Bay (Blaney).

*Thyasira trisinuata* (d'Orbigny).

*Cryptodon obesus*, Verrill, 1873.







"This species is more nearly related to *C. flexuosus* of Europe than to *C. gouldi*. The three should be kept distinct." (Verrill in American Journal of Science.)

Casco Bay (Verrill and Kingsley); outside Casco Bay, 50 to 95 fath. (Verrill).

*Thyasira inæqualis* (Verrill and Bush).

Casco Bay (Verrill).

*Thyasira equalis*, Verrill and Bush.

Eastport, Gulf of Maine (Verrill).

*Axinopsis orbiculata*, Sars.

Broad Sound, Casco Bay, 15 to 30 fath. (Verrill); rare in Frenchman's Bay, 15 fath. (Blaney).

*Axinopsis orbiculata* var. *inequalis*, Verrill and Bush.

Frenchman's Bay, rare (Blaney).

*Rochefortia planulata* (Stimpson).

*Kellia rubra*, Gould, 1841.

*Lasæa planulata*, Kingsley, 1901.

Just outside Casco Bay (Kingsley); Eastport, 8 to 15 fath. (Verrill).

*Turtonia minuta* (Fabricius).

*Turtonia nitida*, Verrill, 1873.

Scarboro (Fuller); Casco Bay (Kingsley); Frenchman's Bay (Blaney).

*Cardium pinnulatum*, Conrad.

Casco Bay to Eastport.

*Cardium ciliatum*, Fabricius.

*Cardium islandicum*, Linné.

Casco Bay to Eastport.

*Serripes grœnlandicus* (Gmelin).

*Aphrodite grœnlandica*, Gould, 1870.

*Cardium grœnlandicum*, Mighels, 1841.

Casco Bay (Kingsley); Frenchman's Bay (Blaney).

*Venus mercenaria*, Linné.

(Quohaug, or round clam.)

Casco Bay; Frenchman's Bay, one valve dredged in 10 fath. (Blaney); Damariscotta river at Newcastle (Mrs. E. P. Wentworth); Popham Beach, single valves (Norton); Hanaseeket river, Freeport (Dr. W. C. Kendall).

*Venus mercenaria* var. *notata*, Say, 1822.

With clams dug in vicinity of Portland (Mighels, 1843 list).

*Callocardia morrhuana* (Linsley).

*Cythera convexa*, Conrad, Mighels, etc.

*Callista convexa*, Verrill, 1873.

Casco Bay to Eastport.

*Liocyma fluctuosa* (Gould).

*Tapes fluctuosa*, Gould, 1841.

Frenchman's Bay, rare, a few valves dredged in 35 fath. (Blaney).

*Gemma gemma* (Totten).

*Venus gemma*, Mighels, 1843.

Casco Bay to Frenchman's Bay.

*Gemma gemma* var. *totteni*, Stimpson.

Found in company with the preceding.

*Gemma gemma* var. *purpurea*, H. C. Lea.

South Portland (Wentworth); Hanaseeket river, Freeport (Dr. Kendall); Damariscotta river at Newcastle (Wentworth).

*Petricola pholadiformis*, Lamarck.

Quahog and Casco Bays (Fuller, Verrill, Kingsley); Hanaseeket river (Dr. Kendall).

*Tellina tenera*, Say.

*Angulus tener*, Kingsley, 1901.

Just outside Casco Bay (Kingsley); Scarboro Beach (Wentworth).

*Macoma balthica* (Linné).

*Macoma fusca*, Mighels, 1843, Gould, 1870.

*Tellina fusca*, Stimpson, 1851.

Casco Bay to Eastport.

*Macoma calcarea* (Gmelin).

*Sanguinolaria sordida*, Gould, 1841.

*Tellina sordida*, Mighels, 1843.

*Tellina proxima*, Stimpson, 1851.

*Macoma proxima*, Gould, 1870.

Whole coast of Maine.

*Siliqua costata* (Say).

*Solen costatus*, Say, 1821.

*Machæra costata*, Gould, 1841, 1870.





While Stimpson, in his 1851 list, gives "whole New England coast," as the range for this species, we have only the following authentic records:

Casco Bay (Chickering, Kingsley); Scarboro Beach (Fuller in P. S. N. H.); Old Orchard and Scarboro (Wentworth).

✓ *Ensis directus* (Conrad), 1843.

*Solen ensis* var. *americana*, Gould, 1870.

*Ensatella americana*, Verrill.

(Razor clam.)

✓ Whole coast of Maine.

✓ *Spisula* (*Hemimactra*) *solidissima*, Dillwyn.

*Mactra gigantea*, Mighels, 1843.

*Mactra solidissima*, Stimpson, 1851, Gould, 1870.

(Sea, surf, or hen clam.)

This species seems to be rather scarce on the Maine coast. We have only the following records and these mostly of dead specimens:

Saco Beach (Mighels); Scarboro Beach (Fuller); Casco Bay (Chickering and Kingsley); Ash Point, Knox county (Lermond); Frenchman's Bay (Blaney); Great Cranberry Island (Norton); Grand Manan (Stimpson).

Of the edible qualities of this clam, Dr. Mighels, in his 1843 list, remarks as follows: "It is used by a few as an article of food, but it is tough and indigestible and I have known some to be seriously injured by eating it."

✓ *Spisula* (*Hemimactra*) *polynyma* (Stimpson), 1851.

*Mactra ponderosa*, Stimpson, 1851.

*Mactra similis*, Gray.

*Mactra ovalis*, Gould, 1841, 1870.

Casco Bay to Eastport.

✓ *Mulinia lateralis* (Say).

*Mactra lateralis*, Say.

Portland (Fuller in Portland Museum).

✓ *Mesodesma arctata* (Conrad).

*Mactra arctata*, Conrad, 1830.

*Ceronia arctata*, Gould, 1870.

In his 1851 list, Stimpson gives "whole coast," as the range for this species, while we have only the following records:

Saco Beach (Mighels); Old Orchard Beach (Wentworth); just outside Casco Bay (Kingsley); in the vicinity of Portland (Chickering).

✓ *Mya arenaria*, Linné.

*Mya mercenaria*, Say, 1822.

(Common clam.)

Abundant all along the coast of Maine, in sand, mud and cleft of rocks, between tides. Largely consumed as an article of food.

✓ *Mya truncata*, Linné.

Found all along the coast but not very common.

✓ *Saxicava arctica* (Linné).

*Saxicava distorta*, Say, 1822.

*Saxicava rugosa*, Stimpson, 1851, Gould, 1870.

All along the coast, in crevices of rocks at low water-mark to 100 fathoms.

✓ *Panomya norvegica* (Spengler).

*Glycymeris arctica*, Lamarck.

*Panopæa arctica*, Gould, 1870.

Casco Bay (Kingsley); Frenchman's Bay, only valves, 25 to 30 fath. (Blaney); Grand Manan, 40 fath. (Stimpson).

✓ *Cyrtodaria siliqua* (Daudin).

*Glycymeris siliqua*, Lamarck.

*Solen siliqua*, Chickering, 1854.

This species is rare on the coast of Maine. Casco Bay (Chickering, Fuller and Kingsley); only valves dredged in Frenchman's Bay (Blaney); Bar Harbor (Henderson).

✓ *Zirfæa crispata* (Linné).

*Pholas crispata*, Linné, 1758.

Casco Bay (Fuller, Verrill, Kingsley, Lee); Popham Beach (Norton); Old Orchard (Winkley); Penobscob Bay, 50 fath. hard clay (Lermond); Frenchman's Bay, one valve in 10 fath. (Blaney); Eastport and Grand Manan (Stimpson).

✓ *Pholas truncata*, Say, 1822.

Scarboro (E. P. Sampson, per E. W. Roper in Conchologists Exchange, Vol. 1, p. 65, 1887).







*Xylophaga dorsalis*, Turton.

Just outside Casco Bay (Verrill and Kingsley).

✓ *Teredo nana*, Turton.

*Teredo megotara*, Hanley.

"In pieces of drift-wood, cast upon the beach in Jacob's Cove, Ironbound Island, Frenchman's Bay, after a hard southerly storm, September 10, 1902" (Blaney).

*Teredo dilatata*, Stimpson.

Casco Bay, "comparatively abundant, boring in lobster pots and cars" (Kingsley); Scarborough (Fuller in P. S. N. H.).

*Scaphopoda* (Horn or Tusk Shells).

*Dentalium agile*, Sars.

Just outside Casco Bay, 50 to 95 fath. (Verrill and Kingsley).

*Dentalium entalis* (Linné).

*Dentalium striolatum*, Stimpson, 1851.

*Entalis striolata*, Gould, 1870.

Casco Bay to Eastport.

*Dentalium occidentale*, Stimpson, 1851.

*Dentalium dentale*, Gould, 1841, 1870.

Deep water off Maine coast, Casco Bay to Eastport.

*Siphonodentalium lobatum* (Sowerby).

*Siphonodentalium vitreum*, (M. Sars) Verrill.

Gulf of Maine, 60 to 107 fath. (Verrill).

*Amphineura* (Chitons or Mermaid-cradles).

*Lepidopleurus alveolus*, Sars.

*Leptochiton alveolus*, Dall, 1889.

Gulf of Maine, 150 fath. (Verrill).

*Lepidopleurus cancellatus* (Sowerby).

*Leptochiton cancellatus*, Verrill, 1882.

Cashes Ledge, 30 to 40 fath. (Verrill).

✓ *Hanleyia mendicaria* (Mighels and Adams), 1842.

*Chiton mendicarius*, Stimpson, 1851; Gould, 1870.

Casco Bay to Grand Manan.

*Trachydermon ruber* (Linné).

*Chiton lævis*, Loven.

*Chiton ruber*, Gould, 1870.

Whole coast of Maine.

*Trachydermon ruber* var. *index*, Balch.

Blue Hill Bay, off Harriman's Point, 12 fath., one adult, one young and one half-grown (F. N. Balch).

*Trachydermon albus* (Linné).

*Chiton albus*, Gould, 1870.

Whole coast of Maine.

*Tonicella marmorea* (Fabricius).

*Chiton fulminatus*, Couthouy, 1838.

*Chiton lævigatus*, Fleming, Mighels, 1843.

*Chiton marmoreus*, Gould, 1870.

Whole Maine coast.

*Tonicella marmorea* var. *cærulea*, Winkley.

"In this variety the rose color gives place to a delicate, light blue," Eastport (Winkley).

*Tonicella blaneyi*, Dall.

Frenchman's Bay, dredged in about 20 fath. (Blaney).

*Amicula vestita* (Broderip and Sowerby).

*Chiton vestitus*, B. and S., 1828.

*Chiton emersonii*, Couthouy, 1838.

*Amicula emersonii*, Gould, 1870.

*Stimpsoniella emersonii*, Verrill, 1873.

Casco Bay (Mighels, Chickering, Winkley, Lee, Kingsley); Portland Harbor (Fuller in P. S. N. H.); outside Casco Bay (Verrill); Frenchman's Bay, only one specimen taken from a haddock (Blaney).

Prof. Lee of Bowdoin College informs me that the specimens of this species, taken by him on Whaleboat Island, were unusually large, measuring 2 1-2 inches in length.

*Chætoderma nitidulum*, Loven.

Just outside Casco Bay, 50 to 95 fath. (Kingsley).

#### *Gasteropoda* (Univalves or Sea Snails).

*Acmæa testudinalis* (Muller).

*Patella amœna*, Say, Couthouy, Mighels.

*Tectura testudinalis*, Gould, 1870.

Whole coast of Maine, on rocks at low-water mark and in tide pools.









- ✓ *Acmaea alveus* (Conrad).  
Very common all along the coast, on eel grass and occasionally on rocks.
- ✓ *Lepeta caeca*, Muller.  
*Patella candida*, Gould, 1841.  
*Pilidium candidum*, Stimpson, 1851.  
Casco Bay to Eastport.
- ✓ *Puncturella noachina* (Linné).  
*Cemoria princeps*, Mighels and Adams, 1842.  
*Diadora noachina*, Stimpson, 1851, Verrill, 1873.  
*Cemoria noachina*, Gould, 1870.  
Whole coast of Maine.
- ✓ *Calliostoma occidentale* (Mighels and Adams), 1842. reabsorb  
*Trochus occidentalis*, Stimpson, 1851, Gould, 1870. Eastport  
Whole coast of Maine.
- ✓ *Solariella obscura* (Couthouy).  
*Margarita obscura*, Gould, 1870.  
*Machæroplax obscura*, Verrill, 1882.  
Whole coast of Maine.
- Solariella obscura* var. *bella* (Verkruzen).  
A few dredged off Ironbound Island, Frenchman's Bay (Blaney); "The variety is the predominant form at Eastport" (Verrill).
- ✓ *Margarites helicina* (Phipps). Bar H  
*Margarita arctica*, Leach, 1819. Eastport.  
*Margarita campanulata*, Morse, 1867.  
Whole coast of Maine.
- ✓ *Margarites cinera* (Couthouy).  
Whole coast of Maine.
- Margarites olivacea* (Brown).  
*Margarita argentata*, Gould, 1870.  
Whole coast of Maine.
- Margarites minutissima*, Mighels, 1843.  
A single specimen taken from the stomach of a haddock in Casco Bay (Mighels). "It is not very nearly allied to any of the other species found on the coast. Under a magnifier it somewhat resembles *M. varicosa*, in the ultimate whorl. It is, however, readily distinguished by its very depressed and obtuse spire."—Mighels.

Margarites groenlandica (Ginelin).

*Off Seal Harbor  
Eastport*

Margarita undulata, Gould, Mighels, Stimpson.

Whole coast of Maine.

Margarites acuminata (Mighels and Adams), 1842.

Grand Manan, 40 fath., soft mud (Stimpson).

Molleria costulata (Moller).

Margarita costulata, Moller, 1842.

Adeorbis costulata, Stimpson, Gould.

Hussey Sound, Casco Bay (Fuller in P. S. N. H.);

Frenchman's Bay common in 25 to 30 fath.

(Blaney); Grand Manan, 4 to 30 fath. (Stimpson).

Stilifer stimpsoni, Verrill.

Georges Bank, 6 to 60 fath.

"As this lives among the spines of the sea urchin, Strongylocentrotus drobachiensis, I see no reason why it should not be found in Maine."—(Charles W. Johnson.)

Turbonilla interrupta (Totten).

Portland Harbor (Fuller in P. S. N. H.); Nova Scotia,

2 to 107 fath. (Dall).

Tubonilla nivea (Stimpson).

Chemnitzia nivea, Stimpson, 1851.

Frenchman's Bay, "only one dead and very worn specimen which suggests Turbonilla nivea, Stimpson, 20 fath." (Blaney); in 40 fath. mud and gravel, off Grand Manan (Stimpson).

Odostomia modesta (Stimpson).

Chemnitzia modesta, Stimpson, 1851.

Frenchman's Bay, 6 to 8 fath., rare (Blaney).

✓ Odostomia bisuturalis (Say) 1821.

Jaminia exigua, Couthouy, 1838.

Odostomia exigua, Gould, 1841.

Sheepscot river, Lincoln county (Winkley); Damariscotta river at Newcastle (Wentworth).

✓ Odostomia trifida (Totten).

Actæon trifidus, Totten.

On algæ, in an inlet of New Meadows river, Brunswick (Prof. Leslie Lee); Sheepscot river (Winkley); Damariscotta river at Newcastle (Wentworth).

Odostomia seminuda (Adams).

Mass. Bay, northward (Stimpson).







While we have no Maine record for this species, there is no reason why it should not be found on our shores, especially since *bisuturalis* and *trifida* have been reported from rivers in Lincoln and Cumberland counties. Stimpson gives the range of *trifida*, "Buzzard's Bay to New York" and of *bisuturalis*, "Mass. Bay;" while of *seminuda*, he gives the range as from "Mass. Bay, northward."

*Liostomia eburnea* (Stimpson).

*Rissoa eburnea*, Stimpson, 1851.

*Odostomia eburnea*, Kingsley, 1901.

Casco Bay to Grand Manan.

*Menestho striatula* (Couthouy).

*Pyramis striatula*, Couthouy, 1838, Mighels, 1843.

*Menestho albula*, Stimpson 1851; Gould, 1870.

Whole coast of Maine.

*Menestho?* *sulcosa* (Mighels).

*Phasianella sulcosa*, Mighels, 1843.

*Risella sulcosa*, Gould, 1870.

Casco Bay, from the stomach of a haddock (Mighels).

*Eulimella polita* (Verrill).

*Aclis polita*, Verrill, 1872.

Eastport Harbor, 20 fath., shelly bottom, only one perfect specimen (Verrill and Smith).

*Eulimella ventricosa* (Forbes).

Eastport (Verrill).

*Aclis striata*, Verrill, 1880.

Near Eastport (Verrill).

*Syrnola producta* (C. B. Adams).

*Odostomia producta*, Adams, 1842.

*Chemnitzia producta*, Stimpson, 1851.

Portland Harbor (Fuller in Portland museum);

Frenchman's Bay, only one dead and worn specimen, 6 to 8 fath. (Blaney).

*Scala grœnlandica* (Perry).

*Scalaria grœnlandica*, Mighels, 1843; Gould, 1870.

Whole coast of Maine.

*Scala* (*Acirsa*) *costulata* (Mighels and Adams).

*Turritella costulata*, M. and A., 1842.

*Acirsa costulata*, Verrill, 1879.

Whole coast of Maine.

Scala (*Acirsa*) *borealis* (Beck) Morch.

*Scalaria borealis*, Beck, 1841.

Eastport, 10 to 40 fath., shelly bottom (Verrill & Smith).

✓ *Polinices* (*Lunatia*) *heros* (Say).

*Natica heros*, Say, 1822.

Very common all along the coast, from low water-mark to 50 fath., muddy and sandy bottoms. Used by the fishermen for bait.

✓ *Polinices* (*Lunatia*) *triseriata* (Say).

Whole coast of Maine.

✓ *Polinices* (*Lunatia*) *grœnlandica* (Møller).

Whole coast of Maine.

✓ *Polinices immaculata* (Totten).

*Mamma?* *immaculata*, Gould, 1870.

Whole coast of Maine.

*Polinices* (*Lunatia*) *levicula*, Verrill, 1880.

Casco Bay (Verrill, Kingsley); Eastport (Verrill); Gulf of Maine, 26 to 100 fath. (Dall).

✓ *Natica pusilla*, Say, 1822.

Casco Bay (Fuller, Mighels, Chickering); near Eastport, 17 fath. (Fuller).

✓ *Natica clausa*, Broderip and Sowerby, 1829.

*Natica consolidata*, Couthouy.

*Natica borealis*, Beck.

Whole coast of Maine.

*Acrybia flava* (Gould).

*Natica flava*, Gould, 1841; Stimpson, 1851.

*Bulbus flavus*, Gould, 1870.

Portland Harbor (Fuller, in Portland museum); Eastport (Cooper in Gould's *Invert.* 2nd ed.); Grand Manan, 50 fath. mud (Stimpson).

✓ *Amauropsis helicoides* (Johnston), 1835.

*Natica canaliculata*, Gould, 1840.

Off Otter Creek, Mt. Desert, 12 fath, sand (Henderson).

✓ *Velutina zonata*, Gould.

Whole coast of Maine.





✓ *Velutina lævigata* (Linné).

*Sigaretus haliotoideus*, Mighels, 1843.

*Velutina haliotoides*, Stimpson, 1851.

*Velutina haliotoidea*, Gould, 1870.

Whole coast of Maine.

*Marsenina glabra* (Couthouy).

*Catinus perspectivus*, Say.

*Lamellaria perspicua*, Gould, Stimpson, Verrill.

Whole coast of Maine.

*Marsenina ampla*, Verrill, 1880.

Eastport (Dall, Verrill).

*Marsenina prodita* (Loven) 1846.

Eastport (Verrill and Smith).

✓ *Crucibulum striatum* (Say).

*Calypræa striata*, Say, 1826; Mighels, 1843.

Everywhere on the coast of Maine.

✓ *Crepidula fornicata* (Linné).

*Crepidula glauca*, Say, 1822; Gould, 1870.

Southern coast of Maine, as far north as Frenchman's Bay.

✓ *Crepidula convexa*, Say, 1822.

Casco Bay (Verrill, Kingsley); Damariscotta river at Newcastle (Wentworth); Nova Scotia, 0 to 22 fath. (Dall); Mass. Bay, southward (Stimpson).

*Crepidula plana*, Say, 1822.

*Crepidula unguiformis*, Stimpson, 1851.

Old Orchard (Wentworth); Casco Bay (Mighels, et al); Penobscot Bay, 49 to 50 fath. and all along Knox county shore, in dead shells of *Buccinum undatum* (Lermond); whole coast of New England (Stimpson).

✓ *Cingula minuta* (Totten).

*Rissoa minuta*, Gould, 1870.

*Littorinella minuta*, Verrill, 1873.

Casco Bay to Frenchman's Bay; whole New England coast (Stimpson).

✓ *Cingula aculeus*, Gould, 1841.

Whole coast of Maine.

- ✓ *Cingula castanea* (Moller) 1842.  
Mt. Desert (Verrill, 1861; Prof. Cleveland); Frenchman's Bay, 6 to 12 fath. (Blaney); dredged at Eastport (Verrill).
- ✓ *Cingula carinata*, Mighels and Adams.  
*Cingula semicostata*, Mighels and Adams, 1842.  
*Rissoa pelagica*, Stimpson, 1851.  
Whole coast of Maine.
- ✓ *Cingula arenaria*, Mighels and Adams, 1842.  
*Rissoa exerata*, Stimpson, 1851.  
*Rissoa mighelsi*, Stimpson, 1853; Gould, 1870.  
Casco Bay to Grand Manan.
- Cingula areolata* (Stimpson).  
*Turritella areolata*, Stimpson, 1851.  
Dredged near Mt. Desert Island by Prof. W. C. Cleveland (Verrill's list); Mt. Desert (Verrill); Frenchman's Bay, not common (Blaney).
- ✓ *Cingula multilineata* (Stimpson).  
Frenchman's Bay, only one dead specimen, dredged in 5 fath. (Blaney).
- Cingula latior*, Mighels and Adams, 1842.  
Casco Bay (Mighels, Chickering; Fuller).
- Skenea planorbis* (Fabricius).  
*Skenea surpuloides*, Mighels, 1843.  
Whole coast of Maine.
- ✓ *Litorina littorea* (Linné).  
(Pennywinkle.)  
First found at Eastport by Charles B. Fuller in 1862, now very common all along the Maine coast.
- ✓ *Litorina rudis* (Donovan) 1800.  
*Turbo vestitus*, Say.  
*Littorina tenebrosa*, Gould, 1870.  
Very abundant on all rocky shores, between tides.
- ✓ *Litorina palliata* (Say).  
*Littorina littoralis*, Stimpson, 1851.  
Very common all along the shores, on rocks and rockweed.
- ✓ *Lacuna vincta* (Montagu).  
Whole coast of Maine.







✓ *Lacuna neritoidea*, Gould, 1841.

*Lacuna littoralis*, Kingsley, 1901.

Casco Bay (Mighels et al); 45 miles southwest of Seguin, 45 fath. (Verrill); whole New England coast (Stimpson).

✓ *Turritellopsis acicula* (Stimpson).

*Mesalia acicula*, Stimpson, 1851.

*Turritella acicula*, Gould, 1870.

Whole coast of Maine.

✓ *Mesalia erosa* (Couthouy).

*Turritella erosa*, Mighels, Gould, Verrill.

Whole coast of Maine.

✓ *Trichotropis borealis*, Broderip and Sowerby.

*Trichotropis costellatus*, Couthouy.

Whole coast of Maine.

*Trichotropis conica*, Moller.

One dead specimen taken in Gulf of Maine, off Cape Sable, N. S., in 75 fath. (Verrill).

*Torellia fimbriata*, Verrill and Smith, 1882.

One specimen taken near Cashes Ledge, 52 to 90 fath. by "Bache" party (Verrill).

*Torellia vestita*, Jeffreys, 1867.

First taken on our coast in 1872, Gulf of Maine, 150 fath. by "Bache" party (Verrill).

✓ *Aporrhais occidentalis* (Beck).

*Rostellaria occidentalis*, Mighels, 1843.

Whole coast of Maine.

*Urosalpinx cinereus* (Say).

*Fusus cinereus*, Say, 1821.

*Buccinum plicosum*, Mighels, Stimpson.

Casco Bay (Mighels et al); Damariscotta river at Newcastle (Wentworth).

*Trophon truncatus* (Strom).

*Fusus bamffius*, Gould, 1841.

*Tritonium clathratus*, Stimpson, 1851.

*Trophon clathratus*, Gould, 1870.

Whole coast of Maine.

*Trophon clathratus* (Linné).

*Fusus scalariformis*, Gould, 1841.

*Tritonium scalariforme*, Stimpson, 1851.

*Trophon scalariformis*, Gould, 1870.

Casco Bay (Mighels, Fuller, Kingsley); East and West Cod Ledges off Cape Elizabeth (Verrill).

✓ *Trophon clathratus* var. *gunneri*, Loven.

Off Grand Manan and off Cape Sable, 59 fath. (Verrill).

✓ *Purpura lapillus* (Linné).

Very abundant everywhere, on ledges and rocks, between tides.

✓ *Purpura lapillus* var. *imbricata*, Lamarck.

Found in company with the type, but less numerous.

✓ *Columbella* (*Anachis*) *avara* (Say), 1822.

Casco Bay, stomach of a haddock (Mighels).

*Columbella* (*Anachis*) *haliæti* (Jeffreys).

*Anachis costulata*, Verrill.

Gulf of Maine, Cashes Ledge, Jeffreys Bank, etc., 30 to 114 fath. (Verrill).

✓ *Columbella* (*Astyris*) *rosacea*, Stimpson.

*Buccinum rosaceum*, Mighels, 1843.

Whole coast of Maine.

✓ *Columbella* (*Astyris*) *dissimilis*, Stimpson, 1851.

*Astyris zonalis*, Verrill, 1873.

Whole coast of Maine.

✓ *Nassa trivittata*, Say, 1821.

*Buccinum trivittatum*, Adams, 1838.

Whole coast of Maine.

✓ *Nassa obsoleta*, Say, 1821.

*Buccinum obsoletum*, Gould, 1841.

*Ilyanassa obsoleta*, Stimpson, 1865.

Very common all along the coast in coves and inlets, on muddy flats between tides and at low-water mark.

✓ *Buccinum undatum*, Linné.

(Whelk or sea snail.)

Very abundant all along the coast, on rocky bottoms, from low-water mark to 50 or more fathoms.





*Buccinum cyaneum* (Bruguiere).*Buccinum gronlandicum*, G. O. Sars.

Frenchman's Bay, one immature specimen, with protoconch, 10 fath. (Blaney).

*Buccinum tenuis*, Gray.

Off Cape Sable, 88 to 91 fath. (Verrill).

✓ *Chrysodomus decemcostatus* (Say).*Fusus decemcostatus*, Mighels, Gould.*Neptunea decemcostata*, Say, Verrill, 1873.

Common everywhere on the coast of Maine, from low-water mark to 100 fath., prefers rocky bottoms.

✓ *Tritonofusus stimpsoni* (Morch).*Fusus corneus*, Say.*Sipho stimpsoni*, Morch, 1867.*Fusus islandicus*, Gould, 1870.*Neptunea curta*, Verrill, 1873.

Found with the preceding.

✓ *Tritonofusus stimpsoni* var. *liratulus*, Verrill.Sheepscot river (Winkley); a few young specimens dredged at same stations as *stimpsoni* (Blaney).✓ *Tritonofusus pygmaeus* (Gould), 1841.*Tritonium pygmæum*, Stimpson, 1851.*Neptunella pygmæa*, Verrill, 1870.*Chrysodomus* (*Sipho*) *pygmæus*, Dall, 1903.

Whole coast of Maine.

*Tritonofusus sabinii* (Gray).*Buccinum sabinii*, Gray, 1824.

Young specimens taken on Cashes Ledge by A. S.

Packard, Jr., and party of "Bache," 1873 (Verrill).

✓ *Ptychotractus ligatus* (Mighels and Adams).*Fasciolaria ligata*, Mighels and Adams, Stimpson.

Casco Bay to Eastport.

Little N.  
E'port.✓ *Admete couthouyi* (Jay).*Cancellaria couthouyi*, Jay, 1839.*Admete viridula*, Stimpson, Gould, Verrill.

Whole coast of Maine.

*Pleurotomella packardii*, Verrill, 1872.

*Mangilia* (*Pleurotomella*) *packardii*, Dall, 1903.

Gulf of Maine, 110 fath. Station 89 "Bache," 1872.

Gulf of Maine, 105 to 110 fath. Station 54, 1874.

Gulf of Maine, 85 fath. Station 189, 1878.

✓ *Bela incisula*, Verrill, 1882.

*Bela impressa*, Verrill, not Morch, 1881.

Whole coast of Maine.

✓ *Bela virgulata gouldi*, Verrill.

*Bela virgulata*, Verrill, not Reeve, 1881.

Casco Bay (Verrill); Gulf of Maine, 25 to 118 fath., most frequent in 25 to 60 fath., on muddy, gravelly and shelly bottoms (Verrill); Frenchman's Bay, only one dead specimen in 25 fath. (Blaney).

✓ *Bela exarata* (Moller).

*Tritonium mitrula*, Loven, 1846.

*Bela concinnula*, Verrill, 1882.

Casco Bay to Grand Manan.

✓ *Bela cancellata* (Mighels and Adams).

*Fusus cancellatus*, M. and A., 1842.

*Mangelia cancellata*, Stimpson, 1851.

Whole coast of Maine.

✓ *Bela pleurotomaria* (Couthouy), 1838.

*Fusus rufus*, Gould, Mighels.

*Mangelia pyramidalis*, Stimpson, 1851.

Whole coast of Maine.

✓ *Bela nobilis* (Moller), 1842.

*Fusus turricula*, Gould, Mighels.

*Mangelia turricula*, Stimpson, 1851.

✓ *Bela scalaris*, Verrill, 1882.

Whole coast of Maine.

*Bela harpularia* (Couthouy).

*Fusus harpularius*, Couthouy, Gould, Mighels.

Whole coast of Maine.

✓ *Bela decussata* (Couthouy), 1839.

+ v. *pusilla* ✓

Whole coast of Maine.

✓ *Bela bicarinata* (Couthouy).

Whole coast of Maine.

*Bela blaineyi*, Bush - Frenchman's Bay.

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*Bela bicarinata* var. *violacea* (Mighels and Adams).

*Bela violacea*, Gould, 1870.

Casco Bay to Frenchman's Bay.

*Bela pingeli* (Moller) 1842.

Eastport, 20 to 90 fath. (Verrill); Eastport, 15 fath.  
(Winkley).

*Ringicula nitida*, Verrill, 1872.

Gulf of Maine, 110 fath. "Bache" party, 1872  
(Verrill).

*Haminea solitaria* (Say).

*Bulla solitaria*, Gould, Stimpson.

*Bulla insculpta*, Totten.

On the shores of Damariscotta Bay (E. P. Wentworth).

*Scaphander punctostriata* (Mighels and Adams).

*Bulla puncto-striata*, M. and A., 1842.

Casco Bay (Mighels, Kingsley); Portland Harbor  
(Fuller); outside Casco Bay, 50 to 95 fath.  
(Verrill).

✓ *Cylichna alba* (Brown), 1827.

*Bulla triticea*, Couthouy, 1838.

Whole coast of Maine.

*Diaphana debilis* (Gould).

*Bulla debilis*, Gould, 1841; Stimpson, 1851.

Casco Bay to Grand Manan.

*Diaphana hiemalis* (Couthouy).

*Bulla hiemalis*, Couthouy, 1839.

Casco Bay to Grand Manan.

*Retusa gouldi* (Couthouy), 1839.

*Utriculus gouldi*, Gould, 1870.

*Cylichna gouldi*, Verrill.

Casco Bay to Penobscot Bay, rare.

*Retusa pertenuis* (Mighels), 1843.

Whole coast of Maine.

*Retusa mayoi* (Dall), 1889.

Portland (Chas. W. Johnson).

*Tornatina canaliculata* (Say), 1822.

*Bulla obstricta*, Gould, 1841.

Portland Harbor (Fuller in P. S. N. H.).

*Retusa obtusa* Moul. var. *turrita* Moul.  
Frenchman's Bay.

- Philine quadrata*, S. Wood, 1839.  
*Philine formosa*, Stimpson, 1851.  
 Casco Bay (Verrill, Kingsley); outside Casco Bay (Verrill); in deep water off coast of Maine (Stimpson).
- Philine lima* (Brown).  
*Bulla lineolata*, Couthouy, 1839.  
*Philine lineolata*, Stimpson.  
 Whole coast of Maine.
- Philine angulata*, Jeffreys.  
 Casco Bay (Kingsley).
- Philine sinuata*, Stimpson, 1850.  
 Casco Bay (Fuller in P. S. N. H.).
- Philine fragilis*, Sars.  
 Off Cape Sable, 90 fath. fine compact sand (Verrill).
- Philine cingulata*, G. O. Sars.  
 Off Cape Sable, 90 fath. (Verrill).
- Philine finmarchica*, M. Sars.  
 Off Cape Sable, 90 fath. (Verrill).
- Pteropoda* (Free-swimming mollusks).
- Limacina retroversa* (Fleming), 1823.  
*Limacina balea*, Moller, 1842.  
*Spirialis gouldii*, Stimpson, 1851.  
*Heterofusus retroversus*, Gould, 1870.  
 Casco Bay (Fuller in P. S. N. H., Kingsley); whole coast of New England north of Cape Cod (Stimpson).
- Clione limacina* (Phipps), 1773.  
*Clio borealis*, Brug, 1792.  
*Clione papilionacea*, Verrill, 1873.  
 Casco Bay (Kingsley); Portland Harbor (Fuller and D. W. Wood in P. S. N. H.).
- Pædoclio doliiformis*, Danforth, 1907.  
 Harpswell, Casco Bay, 1903 (J. S. Kingsley).
- Nudibranchiata* (Naked-gilled mollusks, without shells).  
*Alderia harvardiensis* (Agassiz).  
*Canthopsis harvardiensis*, Agassiz, 1850.  
 Grand Manan, "very common in sheltered, muddy bays, feeding on filamentous chlorosperms" (Stimpson).





- Æolidia papillosa* (Linné).  
*Doris papillosa*, O. Fabricius, 1780.  
*Æolis farinacea*, Stimpson, 1853.  
*Molgula papillosa*, Verrill, 1871.  
 Casco Bay (Kingsley); Eastport (Verrill).
- Coryphella mananensis* (Stimpson):  
*Æolis rufibranchialis*, Gould, 1870.  
 Whole coast of Maine.
- Coryphella diversa* (Couthouy).  
*Æolis diversa*, Couthouy, 1839.  
 Grand Manan (Stimpson).
- Coryphella rutila*, Verrill, 1879.  
 Eastport (Verrill).
- Coryphella stimpsoni*, Verrill, 1882.  
*Couthona atimpsoni*, Verrill, 1879.  
 Eastport, low-water mark (Verrill); Jeffreys Ledge,  
 51 fath.
- Æolis stellata* (Stimpson), 1853.  
 Grand Manan (Stimpson).
- Æolis purpurea* (Stimpson), 1853.  
 Grand Manan, at Duck Island under stones, at low-  
 water mark (Stimpson).
- Tergipes despectus* (Johnston).  
*Æolis despecta*, Johnston.  
 Casco Bay (Verrill, Kingsley); five miles southwest  
 of Seguin (Verrill).
- Doto coronata* (Gmelin).  
 Casco Bay (Verrill, Kingsley); five miles southwest  
 of Seguin (Verrill); off Duck Island, Grand Manan,  
 15 fath. (Stimpson).
- Doto formosa*, Verrill, 1875:  
 Eastport, low-water mark to 50 fath. (Verrill).
- Dendronotus arborescens* (Muller).  
*Tritonia reynoldsii*, Couthouy, 1838.  
 Kennebunk to Eastport.
- Dendronotus robustus* (Verrill), 1882.  
*Heterodoris robustus*, Verrill, 1879.  
 Casco Bay (Kingsley); Eastport and Grand Manan  
 (Verrill).

*Cadlina repanda* (Alder and Hancock).

*Doris panulata*, Stimpson, 1853.

Casco Bay to Passamaquoddy Bay.

*Acanthodoris pilosa* var. *bifida* (Verrill).

*Doris bifida*, Verrill.

Eastport, under stones at low-water mark (Verrill).

*Acanthodoris ornata*, Verrill, 1879.

Eastport, at low-water mark (Verrill).

*Acanthodoris stellata* var. *bifida* (Verrill).

*Doris stellata*, Gmelin.

*Doris bifida*, Verrill, 1870, 1882.

New Haven to Eastport (Verrill).

*Acanthodoris citrina*, Verrill, 1879.

Eastport, low-water mark (Verrill).

*Adalaria proxima* (Alder and Hancock).

*Doris proxima*, A. and H.

Eastport (Verrill and Smith).

*Lamellidoris bilamellata* (Linné).

*Doris liturata*, Stimpson, 1860.

Casco Bay, "common and of large size near the old mill at the entrance of Basin Cove" (Kingsley).

*Lamellidoris diaphana* (Alder and Hancock).

*Onchidoris diaphana*, Verrill, 1882.

Eastport, not uncommon at low-water mark, under stones (Verrill).

*Lamellidoris muricatus* (Muller).

Eastport, low-water mark (Verrill).

*Lamellidoris tenella* (Agassiz) Gould.

*Doris tenella*, Agassiz, 1850.

Near Eastport, under stones in a large pool, at low-water mark (Verrill).

*Lamellidoris grisea* (Stimpson) Gould.

Near Eastport with *tenella*, but more common (Verrill).

*Idaliella pallida* (Agassiz), Gould.

*Proctaporia fusca*, Stimpson, 1860.

*Amæroecium pallidum*, Verrill, 1873.

Casco Bay (Verrill, Kingsley); five miles southwest of Seguin (Verrill); Eastport, 20 fath. (Verrill).







*Issa lacera* (Muller).

Cashes Ledge, 25 fath. (Verrill).

*Palio lessoni* (d'Orbigny).

*Polycera lessoni*, d'Orbigny.

Casco Bay (Verrill, Kingsley); outside Casco Bay (Verrill); five miles southwest of Seguin (Verrill).

*Ancula sulphurea*, Stimpson, 1853.

Grand Manan (Stimpson).

*Cephalopoda* (Squids, Cuttlefish).

*Polypus arcticus* (Prosch), 1849.

*Octopus bairdii*, Verrill, 1873.

Outside Casco Bay, 50 to 95 fath., muddy bottom (Verrill).

*Loligo pealii*, Lesueur, 1821.

Casco Bay (Kingsley); Deer Isle, Hancock county, taken in a weir (Norton).

*Ommastrephes illecebrosus*, Lesueur.

*Loligo illecebrosa*, Stimpson, 1851.

Whole coast of Maine.

*Stolotenthis leucoptera* (Verrill).

Gulf of Maine, 110 fath. (Verrill).

FRESH-WATER SPECIES.

*Pelecypoda*.

Unionidæ (Fresh water mussels).

*Lampsilis cariosus* (Say), 1816.

*Unio cariosus*, Gould, 1841, 1870.

Reported from Knox, Lincoln and Penobscot counties.

*Lampsilis ochraceus* (Say), 1816.

Kennebeck and Penobscot rivers; Knox and Lincoln counties.

*Lampsilis radiatus* (Gmelin), 1792.

Cumberland, Oxford and Penobscot counties.

*Strophitus undulatus* (Say).

*Anodonta undulata*, Say, 1816.

*Anodon undulata*, Gould, 1870.

Androscoggin river at Bethel, Oxford county (E. W. Roper in B. S. N. H.).

*Anodonta cataracta*, Say, 1816.

*Anodonta fluviatilis*, Stimpson, Morse.

*Anodon fluviatilis*, Gould.

Cumberland county, North Haven, Knox county  
(Henry Jackson, Jr.).

*Anodonta marginata*, Say, 1816.

*Anodonta fragilis*, Lamarck, 1819.

All over the State.

*Anodonta implicata*, Say, 1829.

Cumberland, Oxford, Knox, Piscataquis counties.

Mighels reported this species from a pond near Eastport in 1843.

*Alasmidonta undulata* (Say), 1816, Say, 1818.

*Strophitus sculptilis*, Stimpson, Morse.

*Margaritana undulata*, Gould, 1870.

All over the State, in ponds and rivers.

*Alasmidonta marginata* (Say) 1819.

*Alasmodon marginata*, Gould, 1841.

*Margaritana marginata*, Gould, 1870.

"Often found but not plentiful" (Mighels, 1843);  
(Morse, 1864 list); Westbrook, Cumberland county  
(Rev. E. C. Bolles in P. S. N. H.).

*Margaritana margaritifera* (Linné), 1758.

*Alasmodonta arcuata*, Gould, 1841.

*Margaritana arcuata*, Stimpson, Morse, Gould, 1870.

All over the State in rocky and muddy brooks.

*Unio complanatus* (Solander), (Dillwyn, 1817).

Everywhere throughout the State.

#### Sphæriidæ.

*Sphærium sulcatum* (Lamarck).

*Cyclas sulcata*, Lamarck, 1818.

*Cyclas similis*, Mighels, Stimpson.

All over the State.

*Sphærium striatum* (Lamarck).

Fish and Saint John rivers, Aroostook county, abundant on rocky bottoms (Nylander).

*Sphærium striatinum* var. *acuminatum* (Prime).

Eagle Lake, Aroostook county (Morse, 1864 list).











- Sphærium rhomboideum* (Say), 1822.  
*Cyclas rhomboidea*, Prime, 1853.  
*Cyclas elegans*, Gould, 1841.  
 Kennebunk, York county (Fuller in P. S. N. H.);  
 Aroostook county (Nylander).
- Musculium transversum* (Say).  
 Stroudwater river, Cumberland county (Norton).
- Musculium partumeium* (Say).  
*Cyclas partumeia*, Mighels, 1843.  
*Sphærium partumeium*, Morse, 1864.  
 Great Pond, Cape Elizabeth, Cumberland county  
 (Fuller in P. S. N. H.); a brook South Newcastle,  
 Lincoln county (Mrs. Wentworth); North Haven,  
 Knox county (Henry Jackson, Jr.).
- Musculium partumeium* var. ————  
 ("A form, variety or even species, known also from R. I.  
 and Ohio," Dr. Sterki.)  
 Muddy pond in field, Warren, Knox county (Ler-  
 mond).
- Musculium truncatum* (Linsley).  
*Cyclas calyculata*, Mighels, 1843.  
 Running brooks, under stones (Mighels); "Maine"  
 (Prime in Morse's 1864 list); Aroostook river,  
 Aroostook county (Wentworth).
- Musculium securis* (Prime), 1852.  
 All over the State.
- Musculium securis* var. *cardissum* (Prime).  
 Pout pond, Westbrook, Cumberland county (Norton  
 and P. S. N. H.); Square lake and Fish river,  
 Aroostook county, sandy bottom (Nylander).
- Musculium tenuis* (Prime), 1851.  
*Sphærium tenue*, Morse, 1864.  
 Androscoggin (Prime in Morse's 1864 list); Andros-  
 coggin (Prime in his Monograph, 1865).
- Pisidium virginicum* (Gmelin).  
*Cyclas dubia*, Say, 1817.  
*Pisidium dubium*, Gould, 1850; Prime, 1852.  
*Corneocyclas virginicum*, Baker, 1906.  
 Morse's list, 1864; two specimens in Dr. V. Sterki's  
 collection, from Saco, York county, sent him by  
 Roper.

- Pisidium compressum*, Prime.  
All over the State.
- Pisidium compressum* var. *atile* (Anthony).  
*Cyclas atilis*, Anthony, 1847.  
Westbrook, Cumberland county (Norton).
- Pisidium fallax*, Sterki.  
Aroostook river, rare (Nylander).
- Pisidium fallax* var. *errans*, Sterki.  
*Pisidium fallax* var. *septentrionale*, Sterki.  
Aroostook and Little Madawaska rivers (Nylander).
- Pisidium punctatum*, Sterki.  
Portage lake and Little Madawaska river, rare  
(Nylander).
- Pisidium variabile*, Prime, 1851.  
*Cyclas nitida*, Mighels and Adams, 1842.  
All over the State.
- Pisidium æquilaterale*, Prime.  
All over the State.
- Pisidium adamsi*, Prime.  
*Cyclas nitida*, Mighels, 1841.  
All over the State.
- Pisidium henslowanum*, Sheppard.  
Aroostook county, two young specimens, apparently  
rare, collected by O. Nylander (Sterki).
- Pisidium noveboracense*, Prime.  
Buckfield, Oxford county (John A. Allen); Fogelins  
lake, Aroostook county (in Bryant Walker's collec-  
tion, received from Nylander).
- Pisidium succineum*, Sterki.  
Mud pool in old lime quarry, Thomaston, Knox county  
(Lermond).
- Pisidium walkeri*, Sterki.  
Aroostook county (Nylander).
- Pisidium mainense*, Sterki.  
Aroostook county (Nylander).
- Pisidium roperi*, Sterki.  
Dennysville, Washington county (Bryant Walker);  
Aroostook county (Nylander).





*Pisidium streatori*, Sterki.

Hebron, Oxford county (John A. Allen).

*Pisidium abditum*, Haldeman, 1841.

*Cyclas minor*, Mighels and Adams, 1842.

All over the State.

*Pisidium politum*, Sterki.

Portage and Cross lakes, Aroostook county, rare  
(Nylander).

*Pisidium subrotundum*, Sterki.

Aroostook county (Nylander).

*Pisidium splendidulum*, Sterki.

Knox county (Lermond); Aroostook county (Nylander).

*Pisidium splendidulum* var. ———

Muddy duck pond in field, Warren, Knox county  
(Lermond).

*Pisidium milium*, Held.

Aroostook county, seems to be rare (Nylander).

*Pisidium imbecille*, Sterki.

Aroostook county (Nylander).

*Pisidium rotundatum*, Prime.

Lincoln county (Mrs. Wentworth); Aroostook county  
(Nylander).

*Pisidium ventricosum*, Prime.

Aroostook county (Nylander).

*Pisidium vesiculare*, Sterki.

Aroostook county, rare (Nylander).

*Pisidium ferrugineum*, Prime.

Reported from York, Oxford, Knox, and Aroostook  
counties.

*Pisidium medianum*, Sterki.

Barren Brook bog, Aroostook county (in Bryant  
Walker's collection, received from Nylander).

*Pisidium medianum* var. *minutum*, Sterki.

Aroostook county (Nylander).

*Pisidium pauperculum*, Sterki.

Aroostook county (Nylander).

*Pisidium pauperculum* var. *nylanderi*, Sterki.

Dredged off Oak Point, Portage lake, Aroostook  
county (Nylander).

*Pisidium pauperculum* var. ———

Meadow brook, Rockland, Knox county, only two specimens (Lermond).

*Gastropoda.**Campeloma decisa* (Say), 1817.

*Paludina decisa*, Mighels, Stimpson.

*Melantho decisa*, Morse, Gould.

Everywhere throughout the State.

*Campeloma rufum* (Haldeman), 1841.

South pond, in 20 to 40 feet of water, Buckfield, Oxford county (John A. Allen).

*Valvata sincera*, Say, 1824.

Aroostook county (Nylander).

*Valvata sincera* var. *nylanderi*, Dall, 1905.

Portage lake, Aroostook county, dredged in 18 to 25 feet of water (Nylander).

*Valvata tricarinata* (Say), 1817.

Sagadahoc, Knox, Penobscot and Aroostook counties.

*Amnicola limosa* (Say), 1817.

All over the State.

*Amnicola limosa* var. *porata*, Say, 1821.

*Amnicola orbiculata*, Lea, 1844.

All over the State.

*Amnicola limosa* var. *pallida*, Haldeman, 1842.

*Amnicola lustrica*, Adams, 1842; Mighels, 1843.

*Amnicola pallida*, Gould, 1870.

Found sparingly in small streams and springs at several localities (Mighels); Saco, York county (Wentworth); Dyers river, South Jefferson, Lincoln county (Mrs. Wentworth).

*Lyogyrus pupoidea* (Gould).

*Valvata pupoidea*, Gould, 1840; Mighels, 1843.

Monmouth, Kennebec county (Dr. True in Mighels' 1843 list); "occurs rarely in the southern portion of the State" (Morse 1864 list) Orono, Penobscot county (Anson Allen).

*Ancylus borealis*, Morse, 1864.

Patten, Penobscot county (John M. Gould in Morse's 1864 list); St. John river at Fort Kent, Aroostook county (Nylander).







*Ancylus rivularis*, Say, 1819.

York, Cumberland, Lincoln, Knox, and Penobscot counties.

*Ancylus parallelus*, Haldeman, 1844.

All over the State.

*Ancylus tardus*, Say, 1840.

Aroostook river at Caribou, plentiful (Nylander).

*Ancylus ovalis*, Morse, 1864.

Androscoggin river at Bethel, Oxford county (John M. Gould and Morse).

*Ancylus pumilus*, Sterki, 1904.

Orono, Penobscot county, a few specimens in Bryant Walker's collection received from Anson Allen.

*Lymnæa columella*, Say, 1817.

*Radix columella*, Morse, 1864.

Reported from York, Cumberland, Oxford, Knox, and Penobscot counties.

*Lymnæa columella* var. *chalybea*, Gould, 1870.

Mud pool in old lime quarry, Thomaston, Knox county (Lermond).

*Lymnæa columella* var. *macrostoma*, Gould, 1841.

Brook flowing from Crawford's into Seven-tree pond at South Union, Knox county, season of 1908 (Lermond).

*Lymnæa umbilicata*, Adams.

*Limnæa caperata*, W. G. Binney, 1865.

Buckfield, Oxford county, 3 or 4 specimens in an isolated spring, none found there this season, 1907 (John A. Allen); North Haven, Knox county (Henry Jackson, Jr.).

*Lymnæa desidiosa*, Say, 1821.

*Lymnæa obrussa*, Say, 1825.

*Limnophysa desidiosa*, Morse, 1864.

All over the State.

*Lymnæa desidiosa* var. *decampii*, Streng, 1896.

Barren Brook bog, Caribou, Aroostook county (in Bryant Walker's collection, received from Nylander).

*Lymnæa desidiosa* var. *modicella*, Say, 1825.

Woodland, Aroostook county (in Bryant Walker's collection, received from Nylander).

*Lymnæa humilis*, Say, 1822.

Everywhere throughout the State.

*Lymnæa parva*, Lea, 1841.

*Limnæa curta*, Lea, 1841.

Not yet recorded from Maine, but Baker in *Nautilus*, Vol. 18, page 126, gives its range as from Maine to California.

*Lymnæa catascopium*, Say, 1817.

Reported from Kennebec, Sagadahoc, Penobscot and Aroostook counties.

*Lymnæa caperata*, Say, 1829.

Kennebunkport, York county (Geo. H. Clapp); Ironbound Island, Frenchman's Bay, Hancock county (Blaney).

*Lymnæa palustris*, Muller, 1822.

*Limnæus elodes*, Say, 1821.

*Limnæa umbrosa*, Say, 1832.

Reported from Cumberland, Kennebec, Knox, Somerset and Aroostook counties.

*Lymnæa decollata*, Mighels, 1841.

"Maine" (Mighels, Roper in B. S. N. H.); Unity, Waldo county (Dr. Milliken in Mighels' 1842 and 1843 lists); Penobscot river (Willis collection in P. S. N. H.); Lincoln, Penobscot county (B. S. N. H. and Cambridge Museum).

*Lymnæa decollata* var. *oronoensis*, Baaer.

Orono, Penobscot county (in Bryant Walker's collection, received from Anson Allen).

*Lymnæa emarginata*, Say, 1821.

Sebago lake, Cumberland county (Norton and Haskell); Sebec lake, Piscataquis county (Roper in B. S. N. H.); Aroostook county (Nylander).

*Lymnæa mighelsi*, Binney, 1865.

*Limnæa ampla*, Mighels, 1843.

*Radix ampla*, Morse, 1864.

Aroostook county.





*Planorbis bicarinatus*, Say, 1817.

*Helisoma bicarinatus*, Morse, 1864.

Common all over the State.

*Planorbis bicarinatus* var. *aroostookensis*, Pilsbry, 1894.

Aroostook county (Nylander).

*Planorbis bicarinatus* var. *striatus*, Baker, 1902.

Fish River lakes, Aroostook county (Nylander).

*Planorbis trivolvis*, Say, 1817.

*Planorbis trivolvis* var. *fallax*, Halderman, 1844.

*Planorbis megastoma*, DeKay, 1843.

*Planorbis lentus*, Morse, 1864.

Reported from Cumberland, Oxford, Waldo and Aroostook counties.

*Planorbis campanulatus*, Say, 1821.

*Planorbella campanulatus*, Say, 1821.

All over the State.

*Planorbis exacutus*, Say, 1821.

*Menetus exacutus*, Morse, 1864.

Reported from Oxford, Knox and Aroostook counties.

*Planorbis parvus*, Say, 1817.

*Planorbis elevatus*, Adams, Gould, Mighels.

*Gyraulus parvus*, Morse, 1864.

All over the State.

*Planorbis dilatatus*, Gould, 1841.

"A few specimens only have been found in Harrison, Cumberland county" (Morse, 1864 list).

*Planorbis crista* var. *cristata*, Draparnaud, 1805.

Barren brook, Caribou, Aroostook county, "a\* very small shell and hard to locate" (Nylander).

*Segmentina armigera* (Say).

*Planorbis armigerus*, Say, 1818.

Common all over the State.

*Physa ancillaria*, Say, 1825.

*Physa vinosa* of authors, not of Gould.

*Physa fragilis*, Mighels, 1842; Morse, 1864.

All over the State.

*Physa sayii*, Tappan, 1839.

Aroostook county (Nylander).

*Physa sayii* var. *warreniana*, Lea, 1866.

Reported only from York, Knox and Aroostook counties.

*Physa heterostropha* (Say), 1817.

Common in all parts of the State.

*Physa gyrina* (Say), 1821.

Reported only from Kennebec and Knox counties.

*Physa elliptica*, Lea, 1834.

Aroostook county (in Bryant Walker's collection, received from Nylander).

*Aplexa hypnorum* (Linné), 1758.

*Physa elongata*, Say, Gould, Stimpson.

*Physa hypnorum*, Haldeman, Mighels.

*Nauta elongata*, Morse, 1864.

*Bulinus hypnorum*, W. G. Binney, 1865.

*Bulinus elongatus*, Gould, 1870.

All over the State.

#### LAND SPECIES.

*Alexia myosotis*, Draparnaud.

*Auricula denticulata*, Gould, 1841.

*Tralia* (*Alexia*) *myosotis*, Dall, 1903.

Portland (Dr. Parsons and Fuller in P. S. N. H.);  
"found in the interstices of a sea-wall in Portland Harbor, at low tide" (Morse).

*Melampus lineatus*, Say.

*Melampus bidentatus*, Say, 1822.

*Auricula bidentata*, Gould, 1841.

In the vicinity of Portland (Morse; Fuller, Lee and Wentworth); banks of the New Meadows river, Brunswick (Prof. Lee, Norton and Lermond).

*Carychium exiguum* (Say).

*Pupa exigua*, Say, 1822.

*Bulinus exiguus*, Binney, 1851.

Found throughout the State.

*Carychium exile*, H. C. Lea, 1841.

Hebron and Buckfield, Oxford county (John A. Allen); Aroostook county, common (Nylander).







*Carychium exile* var. *canadense*, Clapp, 1906.

Reported from York, Waldo, Penobscot and Aroostook counties.

*Cochlicopa lubrica* (Muller).

*Helix lubrica*, Muller, 1774.

*Zua lubricoidea*, Morse, 1864.

*Cionella sub-cylindrica*, Gould, 1870.

*Ferussacia subcylindrica*, W. G. Binney, 1885.

*Bulimus lubricoides*, Stimpson, 1851.

All over the State.

*Vallonia excentrica*, Sterki, 1893.

Reported from Cumberland, Knox, Hancock, Penobscot and Aroostook counties.

*Vallonia pulchella* (Muller) 1774.

*Helix minuta*, Say, 1817.

*Vallonia minuta*, Morse, 1864.

All over the State.

*Vallonia costata* (Muller), 1774.

Reported from Kennebec, Knox, Lincoln, and Hancock counties.

*Acanthinula harpa* (Say).

*Helix harpa*, Say, 1824.

*Pupa costulata*, Mighels, 1844.

*Bulimus harpa*, W. G. Binney, 1865.

*Zoogenites harpa*, Morse, 1864.

Reported from Cumberland, Oxford, Kennebec, Knox, Waldo, Hancock and Aroostook counties.

*Strobilops labyrinthica* (Say), 1817.

Reported from Cumberland, Oxford, Knox, Penobscot and Aroostook counties.

*Strobilops affinis*, Pilsbry, 1893.

Bethel, Oxford county (Wentworth).

*Strobilops virgo*, Pilsbry, 1892.

Reported from York, Oxford, Knox, Penobscot, and Piscataquis counties.

*Pupoides marginatus* (Say).

*Cyclostoma marginata*, Say, 1821.

*Pupa falla*, Say, 1825; Gould, 1870.

*Leucocheila fallax*, Pilsbry, 1898.

Westbrook, Cumberland county (Norton).

- Bifidaria corticaria* (Say).  
*Odostomia corticaria*, Say, 1817.  
*Leucochila corticaria*, Morse, 1864.  
*Pupa corticaria*, W. G. Binney, 1885.  
 Cumberland and Oxford counties.
- Bifidaria contracta* (Say), 1822.  
 Cumberland, Oxford and Penobscot counties.
- Bifidaria tappaniana* (C. B. Adams), 1842.  
 Oxford, Knox, Penobscot and Aroostook counties.
- Bifidaria pentodon* (Say), 1821.  
*Pupa curvidens*, Gould, 1841; Mighels, 1843.  
 All over the State.
- Pupilla muscorum* (Linné), 1758.  
*Pupa badia*, Adams, Gould, Binney,  
 Found in all the coast counties.
- Pupilla muscorum* var. *unidentata*, Pfeiffer, 1821.  
 Thomaston, Knox county (Lermond).
- Vertigo milium* (Gould), W. G. Binney, 1885.  
 Reported from York, Cumberland, Oxford, Kennebec  
 and Penobscot counties.
- Vertigo ovata* (Say), 1822.  
*Pupa modesta*, Say, Gould; Mighels.  
 Cumberland, Oxford, Kennebec, Lincoln and Penobscot counties.
- Vertigo ventricosa* (Morse), 1865.  
 Cumberland, Oxford, Hancock, Penobscot and Aroostook counties.
- Vertigo ventricosa* var. *elatio*r, Sterki, 1894.  
 Oxford, Knox, Hancock and Aroostook counties.
- Vertigo gouldi* (Binney), 1843.  
 York, Cumberland, Knox, Hancock and Aroostook counties.
- Vertigo gouldi* var. *paradoxa*, Sterki, 1900.  
 Woodland, Aroostook county, rare (Nylander).
- Vertigo bollesiana* (Morse), 1865.  
 York, Oxford, Hancock, Penobscot and Aroostook counties.
- Vertigo tridentata*, Wolf, 1870.  
 Quebec and Maine (Pilsbry, 1898 list).





*Vertigo pygmæa* (Draparnaud), 1801.

*Vertigo callosa*, Sterki, 1890.

Gardiner, Kennebec county (Mrs. E. P. Wentworth);  
Newcastle, Lincoln county (Wentworth).

*Succinea ovalis*, Say, 1817.

*Succinea obliqua*, Say, 1824; Stimpson, 1851; Gould, 1870

*Succinea campestris*, Gould, 1841; Mighels, 1843.

All over the State.

*Succinea ovalis* var. *totteniana*, Lea, 1841.

All over the State.

*Succinea retusa*, Lea, 1837.

*Succinea ovalis*, Gould, Mighels, Morse.

All over the State.

*Succinea avara*, Say, 1822.

*Succinea wardiana*, Lea, 1841.

*Succinea vermeta*, Tryon, 1866.

All over the State.

*Philomycus carolinensis* (Bosc).

*Limax marmoratus*, DeKay, 1839.

*Limax togata*, Gould, 1841.

*Tebennophorus carolinensis*, Morse, Gould.

York, Oxford and Aroostook counties.

*Philomycus dorsalis*, Binney, 1842.

*Pallifera dorsalis*, Morse, 1864.

Kennebunkport (Clapp); Aroostook county (Nylander).

*Arion circumscriptus*, Johnston.

*Limax fasciatus*, Nilsson, 1822.

*Arion fuscus*, Morse, 1864.

Kennebunkport, York county (Clapp); on a stone wall, Elm St., Portland (Norton and Lermond); Thomaston, Knox county, common under stones, planks, logs, etc. (Lermond).

*Pyramidula alternata* (Say).

*Helix alternata*, Say, 1817.

*Patula alternata*, W. G. Binney, 1885.

All over the State.

*Pyramidula cronkhitei anthonyi*, Pilsbry, 1907.

*Pyramidula striatella*, Anthony, 1840.

*Patula cronkheitei*, Tryon, 1866.

Common everywhere throughout the State.

- Pyramidula asteriscus* (Morse), 1857.  
*Planogyra asteriscus*, Morse, 1864.  
 Cumberland, Oxford, Kennebec, Penobscot and Aroostook counties.
- Helicodiscus parallelus* (Say).  
*Helix lineata*, Say, 1817.  
*Planorbis parallelus*, Say, 1821.  
*Hyalina lineata*, Gould, 1870.  
 All over the State.
- Punctum pygmæum* (Draparnaud), 1801.  
*Punctum minutissimum*, Morse, 1864.  
*Microphysa pygmæa*, W. G. Binney, 1885.  
 Reported from York, Cumberland, Oxford, Hancock, Penobscot and Aroostook counties.
- Sphyradium edentulum* (Draparnaud).  
*Pupa edentula*, Draparnaud, 1805.  
*Isthmia simplex*, Morse, 1864.  
*Pupa simplex*, Gould, 1840.  
*Vertigo simplex*, Stimpson, Morse, Gould.  
 Reported from York, Oxford, Hancock, Penobscot and Piscataquis counties.
- Limax maximus*, Linné, 1758.  
 Bar Harbor, Hancock county (J. B. Henderson, Jr.).
- Limax flavus*, Linné, 1758.  
*Limax variegatus*, Binney, 1851.  
 "Occurs rarely in Portland" (Morse, 1864 list).
- Agriolimax agrestis* (Linné), 1758.  
*Limax agrestis*, Morse, Gould.  
 Reported from York, Oxford, Knox and Hancock counties.
- Agriolimax campestris* (Binney), 1841.  
 Reported from Oxford, Knox and Hancock counties.
- Vitrina limpida*, Gould, 1850.  
*Vitrina pellucida*, C. B. Adams, 1842; Binney, 1851.  
 All over the State.
- Vitrea cellaria* (Muller), 1774.  
*Hyalina cellaria*, Morse, 1864; Sterki, 1907.  
 Portland (Morse, 1864 list); Saco, York county (Winkley); Castine, Hancock county (Wentworth).











- Vitrea hammonis* (Strom), 1765.  
*Hyalina radiatula*, Alder, 1830.  
*Helix electrina*, Binney, Gould, Mighels.  
*Zonites viridulus*, W. G. Binney, 1885.  
 All over the State.
- Vitrea binneyana* (Morse), 1864.  
 All over the State.
- Vitrea ferrea* (Morse), 1864.  
 All over the State.
- Vitrea indentata* (Say), 1822.  
 From all the counties except Aroostook.
- Vitrea rhoadsi*, Pilsbry, 1899.  
 Kennebunkport (Henderson and Clapp); Buckfield  
 (John A. Allen); South Portland (Wentworth).
- Vitrea multidentata* (Binney), 1840.  
 "A few specimens have been found in Cumberland and  
 Oxford counties" (Morse, 1864 list); Buxton, York  
 county (Fuller in P. S. N. H.).
- Vitrea lamellidens* (Pilsbry).  
 Buckfield, Oxford county (John A. Allen).
- Euconulus fulvus* (Muller), 1774.  
 All over the State.
- Euconulus chersinus polygyratus* (Pilsbry), 1899.  
*Helix chersina*, Say, 1821; Morse, 1867.  
 All over the State.
- Zonitoides nitidus* (Muller).  
*Helix nitida*, Muller, 1774.  
 Bar Harbor, Hancock county (Geo. H. Clapp).
- Zonitoides arboreus* (Say).  
*Helix arborea*, Say, 1817.  
 Common everywhere throughout the State.
- Zonitoides minusculus* (Binney).  
*Helix minuscula*, Binney, 1840.  
 Kennebunk, York county (Fuller in P. S. N. H.); near  
 Portland (Morse; Fuller in P. S. N. H.); Rock-  
 land, Knox county, one specimen in an old lime  
 quarry (Lermond); North Haven, Penobscot Bay,  
 extremely rare (Henry Jackson, Jr.).
- Zonitoides exiguus* (Stimpson).  
*Helix exigua*, Stimpson, 1850.  
 All over the State.

*Zonitoides milium* (Morse), 1859.

Generally distributed over the State, but rare.

*Circinaria concava* (Say), 1821.

Over the State but rare.

*Helix hortensis*, Muller, 1774.

*Helix sub-globosa*, Binney, 1837.

*Helix nemoralis*, Fuller, 1862.

On islands along the coast.

*Hygromia hispida* (Linné), 1758.

Rockland and Thomaston, Knox county (Lermond)

*Polygyra sayana*, Pilsbry, 1907.

*Helix sayi*, Binney, 1840.

*Mesodon sayii*, Morse, 1864.

All over the State.

*Polygyra albolabris* (Say), 1817.

All over the State.

*Polygyra dentifera* (Binney), 1840.

Reported only from Oxford, Piscataquis and Aroostook counties.

*Polygyra thyroides* (Say), 1817.

"Maine" (Fuller in P. S. N. H.); Dr. Jackson's 1837 list.

*Polygyra fraterna* (Say), 1824.

*Stenotrema monodon*, Morse, 1864; W. G. Binney, 1885.

*Helix monodon*, Gould, 1870.

*Polygyra monodon*, Pilsbry, 1898.

Common all over the State.























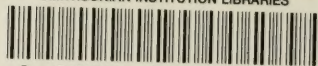








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